Subject: Potential Safety Issue with Canopy Separation on the Aero Vodochody L-39 Airplane

Purpose: This SAFO alerts owners, operators, repair stations, and mechanics holding Airframe and Powerplant (A&P) certificates, to service difficulties and safety issues associated with the Aero Vodochody L-39C and L-39ZA variants.

Background: The L-39C and L-39ZA are operated in the United States under experimental, exhibition and air racing certificates of airworthiness. Aircrews have experienced one or both canopies separating from the aircraft, or partially opening, while in-flight.

Discussion: These instances have occurred with a CANOPY LOCKED indication from the aircraft’s annunciator panel warning light. Analyses of these events show a potential for a false indication from the canopy unlock light. Some of the possible causes for this problem include misalignment of the microswitches sensing the canopy position; failure of the latches on the right side of the canopy to fully engage, possibly caused by a physical obstruction or foreign object interfering with the latches; the canopy hold-open bar becoming distorted and obstructing the right-side canopy latches; and the canopy latches becoming misaligned, subject to wear, corrosion, faulty components, or improper maintenance. It is advised that the actions below be accomplished every 100 hours of flight time, or as incorporated into the aircraft’s inspection program:

a) Inspect the micro switches in the front and rear canopy lock mechanism and make sure they are functioning and aligned per instructions in the Aero Vodochody factory maintenance manual. Perform these checks with the canopy both installed and removed.
b) Inspect the canopy for any foreign objects which may interfere with the right side latching mechanism.
c) Inspect the condition of the hold-open bars at the front and rear canopies. The bars are located on the right rear portion of the front canopy or on the right front section of the rear canopy. They should not be bent, distorted, or otherwise damaged.
d) With the canopy removed, inspect the canopy latches and verify the latches are holding and the springs are tight per procedures in the Aero Vodochody factory maintenance manual.
e) Place placards in view of front and rear seat occupants asking them to ensure that the canopy is secure prior to flight.
f) Amend the aircraft checklist to include checking of the canopy to ensure that it is secure.

**Recommended Action:** Owners, operators, repair stations, and mechanics that operate and maintain Aero Vodochody L-39C and L-39ZA airplanes should familiarize themselves with the information found in this SAFO, and in the associated Airworthiness Certification job aid.

**Contact:** Questions or comments regarding this SAFO should be directed to the Certification Procedures Branch, AIR-110, at (202) 267-1575.